WHAT IS CLAIMED IS:.

1. A method of converting application data to transport data in a power line communication system, the method comprising:

  receiving application data from an application in a device through a service access point, wherein application data may be connection-oriented or connectionless;

  analyzing a connection type and a connection specification to determine if a connection exists for the application data;

  if a connection exists for the application data, mapping the application data into transport data; and

  transmitting the transport data across the power line communication system.

2. The method of claim 1, the method comprising automatically establishing a connection if none exists, comprising:

  generating a connection specification based upon the application data and the service access point; and

  establishing a connection based upon the connection specification; and

  mapping the application data into transport data for that connection.

3. The method of claim 1, wherein receiving application data from an application further comprises receiving connection-oriented application data from the application.

4. The method of claim 1, wherein receiving application data further comprises receiving connectionless application data from the application.

5. The method of claim 1, wherein analyzing a connection type and a connection specification further comprising classifying the application data.

6. A method of transmitting data on a network, the method comprising:

  receiving an incoming data packet from an application on a device at one of a plurality of service access points;

  classifying the data packet according to the service access point and at least one rule, causing the packet to be associated with a connection;

  routing the packet to the connection; and

  transmitting the data.

7. The method of claim 6, the method comprising fragmenting the packet into smaller packets as needed based upon the packet size.

8. The method of claim 6, the method comprising fragmenting the packet into smaller packets as needed depending upon the bandwidth of the connection.

9. The method of claim 6, classifying the data packet further comprising determining if a connection exists for the packet, and requesting a connection if a connection does not exist.

10. The method of claim 6, classifying the data packet further comprising analyzing a set of matching parameters to determine if the parameters match those of a rule, and if the parameters do match, associating the packets with a connection identified by a connection identifier in the rule.

11. A method of classifying data packets in a communication system, the method comprising:
    analyzing a set of parameters for an incoming packet, wherein the set of parameters analyzed depends upon a type of service access point from which the data packet came;
    if the set of parameters in the incoming packet match a predefined set of parameters associated with a connection identifier, applying at least one rule to the packet; and
    associating a connection identifier for the predefined set of parameters with the packet.

12. The method of claim 11, applying at least one rule to the packet further comprises applying a plurality of rules to the packet, determined by a rule priority.

13. The method of claim 11, the method comprising transmitting the set of parameters to a connection manager if the set of parameters do not match a predefined set of parameters.